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ABSTRACT

Intended to provide teachers with a variety of holistic activities to promote thinking skills and the synthesis of skills while also raising scores on the Texas Educational Assessment of Minimal Skills (TEAMS), this booklet focuses on activities which teachers can implement immediately. The publication contains major sections for each of the subject areas tested on TEAMS: reading, writing, and mathematics. All three content areas focus on, for example, learning to integrate and relate ideas rather than on drill and practice of isolated skills. The first section, on reading, contains a statement of reading philosophy, 10 reading activities, and definitions of terms. The section on writing contains a writing philosophy statement, 7 descriptive/narrative/class history/informative writing activities, 7 writing activities for other content areas, 4 activities to develop and strengthen the understanding of language structure, and 3 suggestions on grading and evaluating writing. The third section, on mathematics, contains a mathematics philosophy statement and 7 mathematics activities.

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STARTING TOMORROW

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FOREWORD

The concept for the development of Starting Tomorrow evolved in part from educators' concerns regarding techniques for improving students' scores on the Texas Educational Assessment of Minimal Skills (TEAMS). The publication presents activities that are not merely drill and practice exercises which attempt to develop isolated skills. Rather, the suggested activities are holistic in nature, and teachers may use them to promote the synthesis of skills.

The publication contains sections for reading, writing, and mathematics, the three subject areas tested on TEAMS. It should help teachers present a comprehensive program integrating the required essential elements of instruction. Successful teachers observe that when they present such a program students achieve more significant understandings and their TEAMS scores increase as well.

W. N. Kirby
Commissioner of Education

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INTRODUCTION

Student performance as measured by the Texas Educational Assessment of Minimal Skills (TEAMS) appears to be on the rise. However, numerous educators question the techniques some teachers across the state are tempted to use as a result of the urgency to help students raise TEAMS scores. Emphasis on drill and practice of isolated skills is particularly criticized.

Worksheets that drill on individual skills may seem to offer a quick fix to an immediate problem: low TEAMS scores. Unfortunately, no simple remedies exist for the complex problems of students who lack mastery of basic skills. A comprehensive approach to skill development that goes beyond simple drill and practice to application and enrichment is needed for a truly effective solution.

This publication contains major sections for each of the subject areas tested on TEAMS: reading, writing, mathematics. Common threads that run through the philosophy statements of these sections reinforce student development in all three content areas by focusing on similar ways of thinking. For example, learning to integrate and relate ideas is important to all three content areas. The reading section states that reading "requires a dynamic interaction among the reader, the text, and the context of the situation." The writing section defines writing as "an integrated process . . . [in which] students gather information, connect facts and language in a meaningful way, link new information to what they already know, and extend their ideas." Successful learners of mathematics concepts "relate new ideas to previous knowledge, seek relationships among ideas, and apply and extend ideas."

What Starting Tomorrow promotes, then, is a way to teach students how to think. A danger for teachers is to focus too narrowly on TEAMS objectives and to have students practice an objective only as it appears in the TEAMS test. Such instruction misses the broader opportunity for relevant learning in an effort to improve test scores. Teaching students how to approach problems--teaching students the thinking process--will increase scores on specific reading, writing, and mathematics objectives. The opposite approach, on the other hand, may or may not improve performance on the specific objectives and may actually interfere with (or steal time from) students' learning how to think.

Therefore, a primary goal of Starting Tomorrow is to provide teachers with a variety of holistic activities rather than additional drill and practice exercises. These activities go beyond a set of instructional strategies designed to develop individual skills. They provide opportunities for synthesis of skills as students become engaged in connected reading and writing as well as mathematical thinking.

Another goal of Starting Tomorrow is to provide suggestions teachers can implement immediately. The purchase of additional materials is not needed. The activities will be helpful to teachers who realize that students who can read, write, and use mathematics but do not are no better off than those who cannot. Therefore, these ideas supplement and complement existing curricula by employing strategies that develop students who can, and do, read, write, and use mathematics.

READING

READING PHILOSOPHY

Reading has no single accepted definition. However, the 1985 Report of the Commission on Reading* suggests that the majority of scholars in the field now agree on the nature of reading: it is the process of constructing meaning from written texts. Reading is complex in nature and requires the coordination of a number of interrelated sources of information. Furthermore, the Commission states that reading is a holistic act, that success comes from practice over long periods of time, and that interpretation of the text depends on the background of the reader, the purpose for reading, and the context in which reading occurs.

This philosophy--that reading requires a dynamic interaction among the reader, the text, and the context of the situation--pervades the following suggested activities, providing further opportunities for you as the teacher to assist students in becoming successful readers.

READING ACTIVITIES

The following activities are suggested to supplement current reading programs; they provide strategies you may easily incorporate into your instructional day. See Appendix A for a definition of each activity.

1. Story Time

Read to the class for the enjoyment of listening to good literature.

- Set time aside each day to read children's literature to the class. In bilingual class settings, read children's literature in the students' language of instruction and/or English as you deem appropriate. For ESL purposes, select stories with predictable language and discuss unfamiliar concepts.
- For primary grades, choose selections that you can read in one story-time session.
- For intermediate grades, choose longer selections with continuing chapters.

*Commission on Reading, Becoming a Nation of Readers: The Report of the Commission on Reading (Washington, DC: The National Institute of Education, 1985).

- Share something about the author/illustrator with students before or after reading. This could include information about the author/illustrator's life, other published work, and/or style.
- Survey the class for interest and needs, and select literature accordingly.

2. Sustained Reading Time

- Require students to read a book, magazine, newspaper, or any reading material of their choice (the material should be at the students' independent reading level) on a daily basis for a designated period of time.
- Require students to have this reading material at their desks.
- Model sustained reading.
- Allow no one to interrupt the reading time by leaving his or her desk.
- Encourage beginning readers to read aloud if they wish.

3. Respond to Reading Through Writing Experiences

Ask students to respond to their reading by writing on a daily basis. These responses should be in the students' language of instruction.

- Include keeping a journal, developing class summaries from stories read, writing alternative endings to stories, and creative writing inspired by stories.
- Expect beginning readers/writers to write on a daily basis.
- React to the content or substance of the students' writing either formally or informally.

4. Directed Reading-Thinking Activity

Ask open-ended questions that encourage students to make convergent (predictable) and divergent (creative) predictions. The following questions are useful in all subject areas:

- Is the material I am going to read a narrative selection, a description of an event, a recipe, or ...?
- What do you think the selection will be about?

- Do you think the next event in the selection will be happy, sad, perplexing, or...?
- How would you change your original prediction to make a new prediction?
- What are some alternative endings this selection could have?

5. Story Maps (Story Element Charts)

This activity is suitable for students of all ages and is of particular value to the students who have not acquired the essentials of story elements from reading or listening to stories.

- Read aloud or ask students to read a selection in their language of instruction. Ask the following questions after reading the selection:

Who is the story about?

What does the character want to do?

What happens when the character tries to do it?

What happens in the end?

- Prompt students, if necessary, so that they answer correctly.
- Fill in a story map (a graphic representation of a story) with students providing appropriate information. (See Figure 1.)

STORY MAP BASED ON *THE GIFT OF THE MAGI* BY O. HENRY

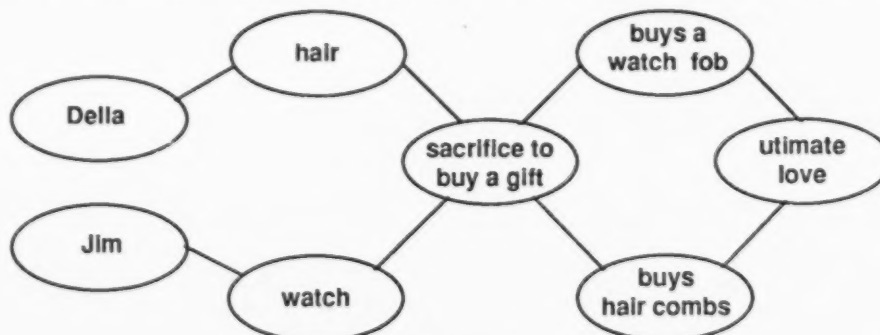


Figure 1

Adapted from *Reading Comprehension: New Directions for Classroom Practice* by John McNeil. (1984) Glenview, IL: Scott, Foresman & Company.

- Write a summary of the story with students using the completed story map as a reference.

6. Language Experience

Ask students to respond to a classroom event, e.g., field trip, classroom visit by speaker, holiday. The students' language of instruction should be considered in this activity.

- Write students' responses in story form on a chart tablet.
- Share completed writing with the entire class.

7. Cloze Stories

Choose brief selections written at a student's independent reading level.

- Delete key words and replace with blank spaces. Deletions should occur no more frequently than every fifth word.
- Instruct students to read the selection carefully and fill in each blank space with an appropriate word. The students may fill in the exact word or another appropriate word.
- Provide the initial letter of deleted words, and delete fewer words for beginning readers.

8. Using Connected Reading to Practice Decoding Skills

Provide practice of word analysis skills in connected reading.

- Use linguistic materials that emphasize newly learned skills. (e.g., initial consonant substitution: Nan ran to the tan van.)
- Show students word patterns that appear in class language experience stories. For example, you might note that the words "tan" and "can" are found on the language experience chart. (See Activity 6.) Ask the students to find similarities in these words.

9. Echo and Choral Reading

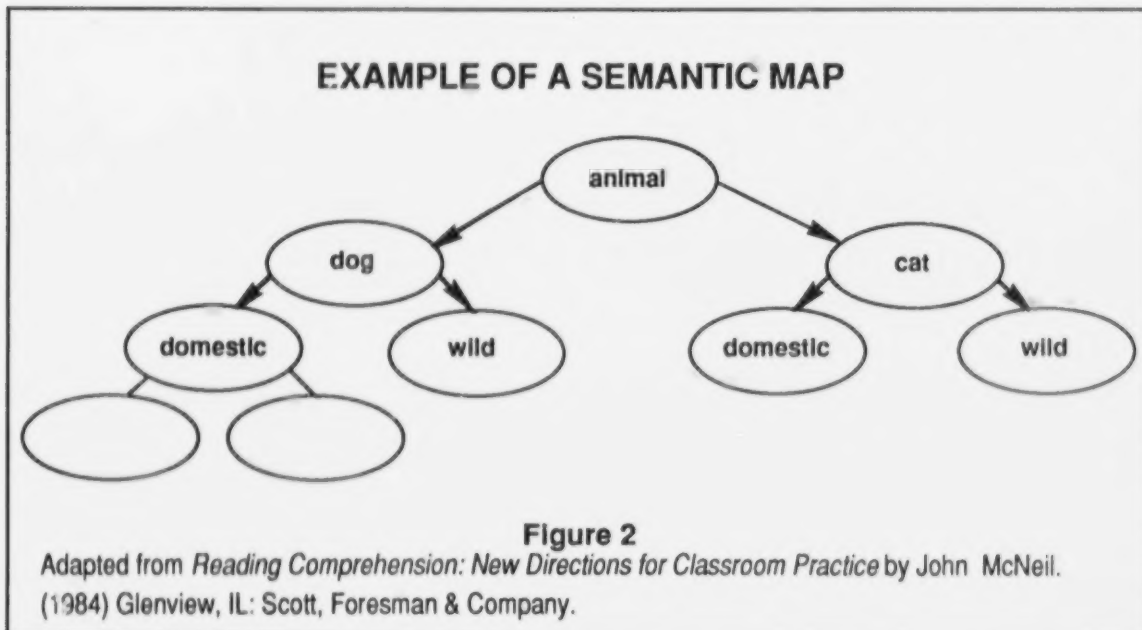
Select narrative prose or poetry that has appropriate rhythm and alliteration for choral or echo reading.

- Read one line aloud with appropriate dramatic phrasing, and ask students to repeat in chorus, or
- Model the reading, discuss the selection, and then have the students read in chorus following the model provided.

10. Networking or Semantic Mapping

Students must have some general understanding of or background knowledge about a topic(s) in order to comprehend written material. A semantic map is a device for activating appropriate background knowledge. The map is an arrangement of vocabulary (or concepts) about a topic that gives a teacher information in regard to what the students know relative to the topic. The map also provides anchor points to which students can attach the new concepts.

- Create a semantic map before or after reading a story. (See Figure 2.)



- Choose a key word (animal, see Figure 2.), and have students generate information about the key word. For example, students might suggest the categories dog and cat.
- Ask students to extend the semantic map. For example, if students said that a dog or cat can be domestic or wild, add that information to the map.
- Guide students in repeating this process. The next extension under the category domestic might be size, i.e., large or small. Add that information to the map.

DEFINITION OF TERMS

Story Time--Story time occurs when the teacher reads good children's literature. Time should be set aside each day to have children's books or chapters of books (for intermediate level students) read for enjoyment.

Sustained Reading Time--Sustained reading is the practice of reading self-selected material for a period of time each day. Teachers should schedule reading time daily and for at least 15 minutes per day.

Responding to Reading Through Writing Experiences--This activity requires students to react to their reading by writing connected text. Some examples of writing in response to reading include: keeping a journal, developing class summaries from stories read, writing alternative endings to stories, creative writing inspired by stories.

Directed Reading/Thinking Activity--The directed reading/thinking activity requires students to set their own purposes for reading. Through guided questions the teacher asks and additional questions (based on the model of the teacher's questions) the students ask, they predict prior to reading and verify predictions while reading.

Story Map/Story Element Chart--A story map is a graphic planning device that assists students in organizing and summarizing the important points of a story.

Language Experience Story--A language experience story is one in which the teacher writes down the student's or group's own words or oral compositions. Students use these as material for reading, writing, spelling, speaking, and listening practice.

Cloze Procedure--The cloze procedure provides a way to measure whether a student can understand material of a certain level of difficulty. To use the cloze procedure, words are systematically deleted from a selection. For the purpose of the activity on page 5, any response is acceptable as long as it is syntactically and semantically consistent with the rest of the context. The emphasis is on the fact that language makes sense.

Decoding (word analysis) Skills--Decoding refers to the ability to associate pronunciation and meaning with a particular printed word.

Echo and Choral Reading--Echo reading is oral reading in which students imitate or repeat another's reading. Choral reading is oral reading in which students read in unison.

Semantic Map/Networking--A semantic map is a visual arrangement of vocabulary (or concepts) about a topic. The map provides the teacher with information about the students' knowledge of a topic and gives the students' anchor points to which they can attach the new concepts.

WRITING

WRITING PHILOSOPHY

Writing is an integrated process. It requires the simultaneous conversion of an idea to language and then to graphic symbols. Writing involves planning, remembering, choosing, spelling, ordering, and the physical act of writing, all at one time. In writing, as in solving problems, students gather information, connect facts and language in a meaningful way, link new information to what they already know, and extend their ideas. Additionally, students must select, arrange, and organize material in a way that fits the reader's needs and the constraints of prose.

Different types of writing demand different types and levels of thinking; therefore, to produce compositions, students must be able to manipulate ideas and language in varying ways. Writing helps students learn to organize and clarify their thoughts. So when you as a teacher emphasize writing, you are emphasizing thinking as well as language development. You should view the teaching of thinking and writing as a developmental process in which you provide students at each level with cognitive activities that build on previous ones and are slightly more complex than those experienced at earlier levels.

When teaching the writing process, your first goal is to encourage in students the confidence that promotes fluency in writing. The classroom atmosphere should be supportive. The classroom should be a place where students feel they can take risks and where they are encouraged to talk, share, and help one another. You will need to encourage students to write in a variety of modes, perhaps beginning with personal narrative and description which are methods of development rooted in students' direct experience.

One of the most effective ways to help your students become better writers is by having them write in the content areas. Language then becomes the vehicle for learning about a subject. Daily writing assignments in all areas of the curriculum will assist students in successfully mastering the necessary skills for writing. The following activities will help you incorporate writing into the daily curriculum, thereby providing students with opportunities to further develop their ability to communicate.

WRITING ACTIVITIES

Descriptive/Narrative/Classificatory/Informative Writing Activities

You can use many daily classroom activities to provide practice for students in descriptive, narrative, classificatory, and informative writing skills.

1. Writing Time

- Set aside time each day for responding to events through writing. In bilingual classes, children may respond in writing in the language they feel most comfortable. In prekindergarten and kindergarten classes, encourage students to respond through art, or "invented spellings" if they are unable to compose.
- Set aside time each day for sharing writing with the class. The teacher may share his or her writing or students may share their writing.

2. Descriptive Writing Activities

- Ask students to describe a character. Give each student two cards from a deck of Old Maid cards. Provide time for each student to write a description of the character on one of the cards. Display both cards as each student reads the descriptions to the class. The class must decide which character is being described.
- Arrange a small display (e.g., an art object or a collection of hats), and ask students to describe the display using an identifiable organizational strategy such as size or color.
- Stage a role play in the classroom. After it is completed, ask students to write accounts of exactly what they saw, being careful to arrange the events in sequence.
- Help students develop a skit based on an event reported in the local newspaper. A fender-bender accident, for example, serves as a great basis for a skit. Students can form groups of three (a police officer and two drivers). The police officer can write an accident report including the statements from each driver. The two drivers can write letters to their respective insurance companies describing the accident and claiming damages.

- Show students a picture filled with many objects. Students then write a list of the objects in the picture. Students can work individually or in small groups to develop a sentence for each item on the list and to draw the picture from memory.

3. Narrative Writing Activities

- **Traveling Tales:** Divide the class into groups of three to five students. Provide each member of the group with a different story starter. Example:

"The moment I woke up from my afternoon nap, I knew that something was wrong. It wasn't the rain tapping against the window. It wasn't the wind brushing the branches across the roof. It wasn't even that the dog's barking had suddenly stopped. Then the phone rang, and I had a feeling that the speaker at the end of the phone line had nothing but bad news"

Students are given a specified length of time (possibly three to five minutes) to begin developing the story. When the teacher calls time, each student passes his or her tale to another person in the group. As the tale travels from student to student within a group, the student reads what has been written and then has the same amount of time to continue the story. When each draft has completed the circuit, students must write an ending for the last narrative passed to them. Finally each completed draft is shared with the group. Then group members select the most promising draft to be revised, edited, and presented to the class. Through the writing process, students can see how a hodgepodge of ideas can be developed into an effective story.

- Display a painting, print, or slide that contains a logical sequence of events and ask students to develop a narrative based on that scene.

4. Classificatory Writing Activities

- Read a story or show a film to the class; then ask students to write short compositions stating two or three specific, elaborated reasons why they liked or disliked the story or film.
- Ask students to write a discussion of the advantages and disadvantages of receiving an allowance.

5. Informative Writing Activities

- Informative writing has a clear purpose and a specific audience. This form of communication is one that students can easily relate to everyday situations. Provide opportunities for students to write letters, invitations, forms, instructions, notes, or simple messages.
- Have students work in pairs to formulate questions they can ask in an interview with a person from their family, school, or community. Students can then arrange the questions in a sequence in preparation for an interview.
- You may easily incorporate the following simple activities that promote students' skills in descriptive and narrative writing into content area activities:
 - In science, students describe a particular type of plant they have grown.
 - In social studies, students write a story about their first day on a Conestoga wagon train.
 - In mathematics, students describe the steps used to solve word problems.

General Writing Activities

Use the following activities daily for students to practice their writing skills.

1. Journals

Ask students to keep journals in notebooks or folders for daily writing practice. Students can make frequent entries that will encourage fluency and create a comfort zone for written expression. Limited English proficient students may write in the language in which they are most comfortable expressing themselves. To help students develop confidence, encourage them to use a pseudonym. Students should be given credit for participation and following directions. Teachers should read the entries and make occasional encouraging notations. Create opportunities for students to write in their journals by asking them to:

- respond to a story, book, film, field trip, or visit from a classroom guest
- react to an event that occurred in the school or community
- contribute to a suggestion box for daily writing topics
- write their reactions to comic strips
- communicate their feelings and reactions to various experiences

2. Formal and Informal Letters

- Help students write letters to parents informing them about school events and inviting their participation.
- Ask students to write persuasive letters to the principal to take particular action regarding a school or community issue, citing two or three specific reasons.
- Give students frequent opportunities to write short thank you letters, letters of invitation, letters of inquiry, or pen pal letters to help them acquire fluency and comfort in writing.

WRITING ACTIVITIES FOR OTHER CONTENT AREAS

Use writing activities such as the following to enhance learning in all content areas:

- Once a social studies, science, music, mathematics, or physical education concept has been introduced, ask students to write a few sentences in their journals to explain what has been taught. Then read each journal to determine if the student would benefit from reteaching. Do not grade the entry but rather use it to give students writing practice and to assess their understanding.
- In hands-on activities such as the use of mathematics manipulatives, science experiments, or the creation of art works, have students write short paragraphs describing the process or product.
- Ask students to write three to five sentences to summarize the main points of a science experiment or a film.

- Guide students in writing cause and effect analyses in social studies, science, music, mathematics, etc.
- Ask students to write explanations of how to play a game (sequencing) or accounts of games they have seen live or on television (narrative).
- Students can construct original story problems using a mathematics concept you have introduced.
- Students can listen to a musical selection and write about how the music made them feel.

ACTIVITIES TO DEVELOP AND STRENGTHEN THE UNDERSTANDING OF LANGUAGE STRUCTURE

The TEAMS written composition component requires students to demonstrate an understanding of language control and sentence structure. You will find the following activities helpful in providing opportunities for students to reinforce their understanding of these concepts:

1. Word Walls (Vocabulary Development)

Students can develop their vocabularies in a meaningful way by discussing and displaying words that will assist them in their writing. In bilingual classrooms, the purpose of this activity can be to develop vocabulary in Spanish to enhance Spanish reading or in English to support ESL objectives.

Help the students to:

- select a topic
- brainstorm vocabulary related to selected writing topics
- discuss word meanings

Write words in large letters on butcher paper or chart tablets, and post on the classroom walls. Depending on the number of words, you may wish to place all "A" words on one sheet of paper, all "B" words on another, etc. In addition, students may wish to keep their own personal "writer's dictionaries." These dictionaries would include blank pages for each letter of the alphabet. The students would then enter the correct spelling of words they feel they will need for their writing assignments.

Leave word walls posted for several weeks to allow students exposure to expanded vocabulary on a daily basis and to enable them to use previously discussed words for many classroom activities.

2. Sentence Combining

In sentence combining and development activities, students work with language supplied to them by shifting, replacing, and altering words or word groups to create a new sentence. Through this type of practice, students learn that there are many ways of expressing an idea and that some ways are clearer and more precise than others. The student replaces one sentence element with an element from another sentence to create a tighter structure. Provide students with several sets of three related sentences. Instruct students to insert an idea from one sentence into the sentence that comes before it, changing the forms of words as necessary.

Example:

The child laughed.

The child was happy.

The child who laughed was happy.

3. Sentence Development

- Unscrambling word cards to form sentences is an effective activity to model appropriate sentence organization for beginning readers and writers. A more advanced form is to have students unscramble sentences to form organized paragraphs. Then students can explain why a paragraph should be organized in the way they have chosen. Content area information is excellent for students to use in this type of activity.
- The Build a Sentence game develops students' skill in expanding an image by adding details. Start by providing students with simple words that can be combined to form a sentence. Then instruct students to add words that expand the sensory appeal of an object, then move to building sentences with greater detail.

Example:

<u>Word</u>	<u>Add smell or touch</u>	<u>Add sound or color</u>	<u>Sentence</u>
apple	cold apple	cold, crunchy apple	I bit a cold, crunchy apple

- Controlled writing provides students with focused practice on one or two problem areas at a time. You may incorporate this type of writing into any area of the curriculum and can use the process with students of varying abilities. It is particularly useful with beginning writers and limited English proficient students. Controlled writing is particularly helpful before other writing activities. Students can see examples of grammatical points or syntactic structures within a text and, at the same time, use that text as a source of vocabulary, ideas, idioms, and organization to help them plan their own writing. You may use pictures as prompts for controlled writing activities. They provide students the opportunities to observe the material and deal with common vocabulary and language forms. Tasks can include such mechanically controlled writing as sentence combining exercises, sequencing activities, or cloze activities.

4. Organizational Skills

Organizational skills are essential to good writing. Provide opportunities for students to practice informative or how-to types of writing to assist them in the development of sequencing skills. With practice, students will recognize logical progressions and the consequences of gaps in sequences.

- To introduce the concept of sequencing, demonstrate the steps of a familiar process such as making a sandwich with a step or two omitted or out of order. Then ask students to write steps of the procedure in order. A demonstration of this activity with student participation would be helpful.
- Ask students to write the steps to a new game.
- After a trip to the library, ask students to write a paragraph outlining the steps in checking out a book.
- Read a story aloud to the class. Students can then write the events of the story in chronological order.

GRADING AND EVALUATING WRITING

Analytical scoring can discourage students' efforts to become comfortable with writing. The following are suggestions for use when scoring compositions:

- Don't mark and put grades on every piece of writing.
- Use holistic scoring frequently to judge the quality of students' communication.
- When grading analytically, always include something positive and constructive on every student's paper.

MATHEMATICS

MATHEMATICS PHILOSOPHY

Problem Solving

The major focus of the Texas mathematics program is to teach students to use mathematics to solve problems. The broad range of Texas educators who assisted in developing the Chapter 75 mathematics program agreed on problem solving as the program's principle aim. The thinking of the Texas educators is supported by the National Council of Teachers of Mathematics who identified problem solving as the major thrust of mathematics education for the 1980's.

Whereas State Board of Education rules identify problem solving as a separate essential element, educators should not teach problem solving as an isolated skill. Rather, problem solving is an underlying approach to the teaching of all mathematics. Computation is not taught as an end in itself but as an extension of real-life situations. Students must experience the opportunity to think critically, to analyze, and to apply skills and concepts to both routine and nonroutine mathematical problems. The essence of teaching mathematics for understanding rests in the teacher's ability to explore topics in a way that promotes mathematical thinking. Learners who think mathematically:

- relate new ideas to previous knowledge
- seek relationships among ideas
- apply and extend ideas *

Our rapidly changing technological society requires students to be able to go far beyond the limits of what has been traditionally taught in mathematics classrooms. To have the opportunity to exercise higher order thinking skills in emerging fields in the future, Texas students must have education today that prepares them to use all of the problem-solving tools and strategies available.

Manipulatives

Students develop mathematical concepts through concrete experiences with manipulative materials. Through class discussion and work with models, students gain the means to retain concepts and associate them with other facts, processes, and properties. Students become active, thinking participants in the learning process. They develop concepts and skills from the concrete level to the pictorial level and then to the abstract level through activities deliberately designed to help them make the transition. A sound developmental program that does not necessarily emphasize pencil and paper computation skills will still improve students' test scores on those skills.

*Ohio Department of Education, Teaching Mathematics Elementary and Middle Grades (Columbus: Ohio Department of Education, 1988), p. 2.

Timed tests

Observing student demonstration with manipulative material is the best way to evaluate students' introductory computation concepts in order to observe students' understanding. Although many districts require students to pass timed tests on basic computation facts, avoid using speed tests to evaluate mastery even at the abstract level. Such tests likely increase students' mathematics anxiety and reinforce the view that mathematics consists only of quick fact recall. Where computational speed is beneficial, teachers should use techniques that do not force students to compete with each other or to solve a problem within a given period of time but allow them to work toward improving individual time for completion. Timed tests should never be used as a way of grouping students for instruction, as they do not give accurate feedback on students' mathematical thinking.

Teaching a Total Curriculum

Every student should have access to the total mathematics curriculum. The total curriculum consists of all the strands of the required essential elements: number concepts, operations, problem solving, measurement, geometry, graphing, probability and statistics. The TEAMS objectives represent only a small sampling of essential elements. When trying to improve students' TEAMS scores, teachers may naturally tend to limit instruction to only TEAMS objectives, which can interfere with the benefits of teaching a complete mathematics program. Many teachers have discovered that when they teach a comprehensive program connecting the various essential elements, not only do their students have a more interesting and relevant experience, but TEAMS scores also increase.

MATHEMATICS ACTIVITIES

The following activities can help enhance students' mathematics skills when incorporated into a comprehensive mathematics program:

1. Probability/Graphing

Conduct daily or weekly graphing activities with students on familiar topics (television watching, hair color, favorite foods, family pets, etc.). Extend with questions about graphs such as, "What fraction of students in the class likes pizza as a favorite food?"

2. Measurement

Ask students to estimate and then measure in metric units the length of their hands, length of their feet, the distance around their wrists, the distance around their heads, and the length of their arms. Students can record the measurements and compare with their estimates to find out how accurate their estimates were. Extend the activity by estimating and measuring objects in the environment.

3. Addition, Subtraction, Multiplication, and Division

Discuss and review a different addition or multiplication family of facts (e.g., 3, 4, and 12 are a multiplication family) each week.

4. Problem Solving

Role play a textbook word problem on some topic not currently being studied; have students guess an answer and act out the problem to see if it is a reasonable guess.

5. Fractions

Ask students fraction questions about everyday information. Examples: How many people are in our class today? How many people are wearing sneakers? What fraction of our class is wearing sneakers today? When taking lunch count, ask what fraction of students is buying lunch.

6. Geometry

Ask students to identify examples of selected geometric shapes in their environment; focus on one or two shapes at a time.

7. Area

Ask students to trace common shapes (their hands, books, etc.) on centimeter-squared paper and to estimate which area is the largest. Students can then count the squares of the graph paper and compare the measurements with their estimates.

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

- (1) acceptance policies on student transfers from other school districts;
- (2) operation of school bus routes or runs on a non-segregated basis;
- (3) nondiscrimination in extracurricular activities and the use of school facilities;
- (4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;
- (5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;
- (6) nondiscriminatory practices relating to the use of a student's first language; and
- (7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.



Texas Education Agency

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